

10728201  
Corrected

## TITLE OF THE INVENTION

## APPLICATIONS OF A DIFFERENTIAL LATCH

This patent application is claiming priority under 35 USC § 121 to co-pending  
5 patent application entitled A DIFFERENTIAL LATCH AND APPLICATIONS  
THEREOF having a serial number of 10/201,152 and a filing date of 7/23/2002, which is now a U.S  
1 Patent 6,643,476

## BACKGROUND OF THE INVENTION

## 10 TECHNICAL FIELD OF THE INVENTION

This invention relates generally to digital circuitry and more in particular to  
differential digital circuitry.

## 15 DESCRIPTION OF RELATED ART

Digital logic circuits, such as AND gates, NAND gates, NOR gates, OR gates,  
exclusive OR gates, latches, inverters, flip-flops, et cetera, are known to be used in a wide  
variety of electronic devices. For instance, digital logic circuits are used in all types of  
computers (e.g., laptops, personal computers, personal digital assistants, Internet,  
infrastructure equipment, telecommunication infrastructure equipment, et cetera),  
20 entertainment equipment (e.g., receivers, televisions, et cetera), and wireless  
communication devices (e.g., cellular telephones, radios, wireless local area networks, et  
cetera).

25 Typically, digital logic circuits are part of a larger circuit, which is fabricated as  
an integrated circuit. For example, a local oscillator within a radio frequency transmitter  
and/or receiver includes a plurality of flip-flops in its divider feedback section to provide  
adjustable divider values. As is known, by adjusting the divider value in a local  
oscillator, the resulting local oscillation can be adjusted to desired values.

30 As is also known, high performance applications, such as a radio frequency  
transmitter/receiver integrated circuit (IC), use differential signaling throughout the signal